## REMARKS

This communication responds to the Final Office Action mailed on March 9, 2009. Claims 6, 14, 16, 19, 26, 35, 42, 53 and 58 are amended, no claims are canceled, and no claims are added; as a result, claims 1-12, 14, 16, 17, 19-33, 35-51, 53-64 and 81 remain pending in this application. Minor amendments have been made to claims 6, 14, 16, 19, 26, 35, 42, 53 and 58 to clarify the meaning of the claim language or to correct dependency, and not for reasons related to patentability. The amendments are fully supported in the original specification. Thus, no new matter has been added.

### Claim Objections

Claims 14, 16, 19, 35 and 53 were objected to under 37 CFR 1.75(c), as being of improper dependent form for depending on canceled claims.

Claims 14, 16, 19, 35 and 53 have been amended to correct their dependency as suggested by the Examiner.<sup>2</sup> Thus, it is respectfully requested that the objection of claim 14, 16, 19, 35 and 53 under 37 CFR 1.75(c) be reconsidered and withdrawn.

#### § 112 Rejection of the Claims

Claims 49-51 and 53-64 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In particular, the Office Action states that "applicants should not be able to avoid an undue breadth rejection by a mere formalism of splitting a single means (a sequence of computer executable instructions) for performing three functions into three separate means" and that "claim 49 is a single means claim, i.e. where a means recitation does not appear in combination with another recited element of means, and is, therefore, subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph." This rejection is respectfully traversed.

See e.g. Application, at FIG. 6 and paragraphs [0024], lines 1-2.

<sup>&</sup>lt;sup>2</sup> See Office Action, p. 6, #3.

<sup>&</sup>lt;sup>3</sup> See id. at p. 7, 2<sup>nd</sup> full paragraph.

<sup>4</sup> See id. at p. 7, 3rd full paragraph.

### 2164.08(a) Single Means Claim

Title: Neighbor Discovery Using Address Registration Protocol Over ELMI

A single means claim, i.e., where a means recitation **does not appear in combination** with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to *Hyatt* is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor.

In re Hyatt - The language [of the final paragraph of Sec. 112] does not go so far as to permit a so-called single means claim, that is a claim which recites merely one means plus a statement of function and nothing else. Attempts to evade this by adding purely nominal elements to such a claim will undoubtedly be condemned.

[Hyatt] Claim 35 reads:

35. A Fourier transform processor for generating Fourier transformed incremental output signals in response to incremental input signals, said Fourier transform processor comprising incremental means for incrementally generating the Fourier transformed incremental output signals in response to the incremental input signals. [Emphasis ours.]<sup>5</sup>

Applicants respectfully submit that reciting three different means for functions in claim 49 is not "a mere formalism of splitting a single means (a sequence of computer executable instructions) for performing three functions into three separate means" as asserted in the Office Action. To the contrary, the specification clearly teaches that each function relies on different structural support. For example, a switch or a router may provide "a means for appending address registration information to a message." A switch or a router in combination with a link, in another example, may provide "a means for sending the message between a router of a router network and a switch of a switch network." A local area network management system, for

<sup>5</sup> See http://bulk.resource.org/courts.gov/c/F2/708/708.F2d.712.83-551.html.

example, may provide "a means for using the address registration information to map the switch network from a local area network management system controlling the router network." Accordingly, claims 49-51 and 53-64 are not single-means claims that "recite merely one means plus a statement of function and nothing else" as defined by In re Hyatt so as to be subject to an undue breadth rejection under 35 U.S.C. § 112, first paragraph.

Therefore, it is respectfully requested that the rejection of claim 49 and its dependent claims 50, 51 and 53-64 under 35 U.S.C. § 112 be reconsidered and withdrawn.

Claims 6, 26, 42 and 58 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In view of the amendments in claims 6, 26, 42 and 58, this rejection is respectfully traversed.

Amended claims 6, 26, 42 and 58 each recite, in pertinent part, "the address registration information is sent in a data packet, wherein the data packet comprises spare bytes." Applicants respectfully submit that claims 6, 26, 42 and 58 particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Therefore, it is respectfully requested that the rejection of claims 6, 26, 42 and 58 under 35 U.S.C. § 112 be reconsidered and withdrawn.

# § 101 Rejection of the Claims

Claims 49-51 and 53-64 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. In particular, the Office Action states that "since all means recitations are provided by computer executable instructions, a system of a computer software per se is not in one of the statutory categories [and] the use of the word 'system' does not inherently mean that the claim is directed to a machine." This rejection is respectfully traversed.

The United States Court of Appeals for the Federal Circuit (CAFC) recently held that the machine-or-transformation test is the sole criterion for patent eligibility under § 101. Here, a claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or

<sup>6</sup> See Office Action, pp. 8-9, lines 13-16.

apparatus, or (2) it transforms a particular article into a different state or thing. *In re Bilski*, 545 F.3d 943, 954.

In contrast to the assertion in the Office Action, claims 49-51 and 53-64 are systems, and not computer software per se. As noted earlier in the discussion of § 112 rejection, each means for a function recited in claim 49 relies on different structural support. In addition, claim 49 recites, in pertinent part, "sending the message between a router of a router network and a switch of a switch network" and "using the address registration information to map the switch network from a local area network management system controlling the router network" (Emphasis added). Recently, the Board of Patent Appeals and Interferences (BPAI) found that a method claim including communicating information between a master device and another device is a method tied to a particular machine or apparatus. In that case, the BPAI reversed the rejection of claims under 35 U.S.C. §101, finding a method claim including communication between devices as patentable subject matter. Ex parte ANDREAS MYKA and CHRISTIAN LINDHOLM, BPAI, Appeal 2008-3874, decided May 13, 2009. Therefore, claim 49 and its dependent claims 50, 51 and 53-64 are clearly tied to hardware and therefore, are patentable subject matter.

For at least the reasons stated above, it is respectfully requested that the rejection of claim 49 and its dependent claims 50, 51 and 53-64 under 35 U.S.C. § 101 be reconsidered and withdrawn.

#### § 103 Rejection of the Claims

Claims 1, 2, 4-12, 14, 16, 17, 19-23, 25-33, 35-39, 41-51, 53-55, 57-64 and 81 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Non-Patent Literature document titled "Integrated Local Management Interface (ILMI) Specification, Version 4.0" (hereinafter "ILMI Spec") in view of Non-Patent Literature document titled "LAN/WAN Management Integration using ATM CNM Interface" by Hanaki et al. (hereinafter "Hanaki"). This rejection is respectfully traversed.

Claim 1 recites, in pertinent part:

either the local area network management system or the wide area network management system uses the address registration information to map the network of routers and the network of switches.

Similar elements are recited in other independent claims 17, 33, 49 and 81. It is respectfully submitted that neither ILMI Spec nor Hanaki, alone or in combination, teaches or suggests the above-quoted elements of claim 1.

The Office states that ILMI Spec shows "either the local area network management system or the wide area network management system [Network Management Station] uses the address registration information to map the network of routers and the network of switches (pages 77-79, section Annex A. Network Management Access to ILMI data)." (Emphasis added) In doing so, the Office Action equates "ATM devices" to a router and a switch. The statements and assertions made in the Office Action are respectfully traversed.

ILMI Spec relates to "a proxy-agent mechanism that uses the existing functions of the ILMI to provide NMS [Network Management Station] access to ATM Interface MIB data." 

ILMI Spec, however, fails to show the above-quoted elements of claim 1 since the NMS in ILMI Spec does not use the ATM Interface MIB data or the ILMI to map the ATM devices. In fact, ILMI Spec further teaches that "since the data in ATM Interface MIBs is already accessible using SNMP via the IMEs, the simplest method to make this data accessible to external management systems is to add an SNMP proxy-agent that accepts SNMP requests from an NMS and relays them to the appropriate IME" located in a corresponding ATM device for local or remote processing. 

As quoted above, since the ATM Interface MIBs in corresponding ATM devices are already accessible and the SNMP proxy-agent relays requests from the NMS to a corresponding ATM device, the NMS in ILMI Spec would not map the ATM devices.

Hanaki is cited to remedy ILMI Spec's deficiencies of "LAN NMS" and "WAN OS [CNM Agent]," Hanaki fails to show the above-quoted elements of claim 1. Applicants were unable to find any such teachings within the bounds of Hanaki.

<sup>&</sup>lt;sup>7</sup> See id. at p. 10, lines 3-6.

<sup>8</sup> See id. at p. 9, last line through p. 10, first line.

<sup>9</sup> See ILMI Spec, p. 78, A.2, lines 5-6 and FIG. 6.

<sup>10</sup> See id. at p. 78, A.3, lines 1-5,

<sup>11</sup> See Office Action, p. 10, lines 15-18.

The arguments in support of the patentability of claim 1 apply similarly to independent claims 17, 33, 49 and 81.

Therefore, since neither ILMI Spec nor Hanaki, alone or in combination, teaches or suggests all the elements recited in claims 1, 17, 33, 49 and 81, these claims should be in condition for allowance.

The arguments stated above with respect to claims 1, 17, 33, 49 and 81 also apply to claims 2, 4-12, 14, 16, 19-23, 25-32, 35-39, 41-48, 50, 51, 53-55 and 57-64, which all depend from one of corresponding claims 1, 17, 33 and 49, and include additional patentable subject matter. Further, any claim depending from a nonobvious independent claim is also nonobvious. *See* M.P.E.P. 2143.03. Thus, for at least the reasons stated above, it re respectfully requested that the rejection of claims 1, 2, 4-12, 14, 16, 17, 19-23, 25-33, 35-39, 41-51, 53-55, 57-64 and 81 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 3, 24, 40 and 56 were rejected under 35 U.S.C. §103(a) as being unpatentable over ILMI Spec in view of Hanaki and in further view of Crooks (Pub. No. US 2002/0055988 A1, hereinafter "Crooks"). It is respectfully submitted that Crooks does not supply the features of independent claims 1, 17, 33 and 49 that are missing from ILMI Spec and Hanaki. Thus, claims 3, 24, 40 and 56 are asserted to be allowable as being dependent on claims 1, 17, 33 and 49, which are submitted to be allowable.

### CONCLUSION

It is respectfully submitted that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned at (408) 278-4047 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. Box 2938 Minneapolis, MN 55402 (408) 278-4047

Date July 1, 2009

Michael K. Hsu

Reg. No. 46,782

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450. Alexandria, VA 22313-1450 on July 1, 2009.

Jonathan Ferguson